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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,386	04/27/2000	ANJA KLEIN	P00.0938	7374

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

NGUYEN, TU X

ART UNIT PAPER NUMBER

2684

DATE MAILED: 01/20/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,386

Applicant(s)

KLEIN ET AL.

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22 and 24-35 is/are pending in the application.
- 4a) Of the above claim(s) 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22 and 24-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 12/3/03 have been fully considered but they are not persuasive.

In response, applicants argue that "it is generally known that GSM systems, in principle, do not use a plurality of transmit antennas". The examiner disagrees, to hereby, the reference cited attachment Forssen et al. (US Patent 5,838,674), Yanagisawa et al. (US Patent 5,995,064), Chavez et al. (US Patent 6,078,823), Bochmann et al. (US Patent 6,282,491), Johansson et al. (US Patent 6,449,482), and Chavez et al. (US Patent 6,549,772) for known art of GSM systems for use with multiple antennas.

Applicants argue that "Hayashi et al. is directed toward signals being sent from the base station to the mobile. Essentially, Jolma et al. is directed toward the uplink while Hayashi et al. is directed toward the downlink". It is only true if the method of Hayashi and Jolma's are one-way communications. However, the combination of Hayashi and Jolma is appropriate because they are two-way communications.

Applicants argue that "Jolma details the process of a call establishment, while Hayashi pertains to signals in the course of a communications between a mobile and a base station". The examiner disagrees because Jolma and Hayashi both are wireless data signal connection oriented.

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2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18, 20, 25-29, 31-32 and 33-34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al. (US Patent 5,806,003) in view of Gardner et al. (US Patent 5,729,557) and further in view of Hayashi et al. (US Patent 6,069,884).

Regarding to claims 18, 20 and 32, Jolma et al. disclose a method for connection setup for mobile stations of a radio communication system having at least one base station, comprising the steps of:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations (see col.3 lines 39-47 and col.4 lines 39-40).

in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction (see col.3 line 65 through col.4 line 2); and

in the mobile station, setting a transmission power dependent on the measured reception power of the base station (see col.2 lines 30-39).

Jolma et al. fail to disclose sending an access radio block to the base station.

Gardner et al. disclose sending an access radio block to the base station (see col.4 lines 51-60). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. with the above teaching of Gardner et al. in order to provide power transmission in different code rates and applying convolutional codes to data having a block structure.

The modified Jolma et al. fail to disclose the codes are used to separate information connections between the base station and mobile stations (see Hayashi, col.1 line 38 through col.3 line 60). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. and Gardner et al. with the above teaching of Hayashi et al. in order to provide differentially-coding information indicative of one of plurality of the antennas to be used.

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Regarding to claim 19, the modifies Jolman et al. fail to disclose the radio communication system is configured as a TDMA/CDMA radio communication system, plurality of connections between the mobile frequency channels information of different connections can be distinguished from one another according to a connection-individual fine structure. Whereby information of are simultaneously transmitted stations and the base station in formed by time slots, whereby the information of different individual codes.

Hayashi et al. disclose the radio communication system is configured as a TDMA/CDMA radio communication system, plurality of connections between the mobile frequency channels information of different connections can be distinguished from one another according to a connection-individual fine structure. Whereby information of are simultaneously transmitted stations and the base station in formed by time slots, whereby the information of different individual codes (see col.1 line 38 through col.3 line 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jolma et al. with the above teaching of Hayashi et al. in order to provide multiple access diversity transmitting wideband signals via a communications system adapted for transmitting narrow-band signal.

Regarding claim 24, the modified Jolman et al. disclose the signal transmitted in the downstream direction is a training sequence signal (see Hayashi, col.1 lines 44-67). "pn codes pilot signal" reads on "training sequence signal".

Regarding claim 25, the modified Jolman et al. disclose the signal transmitted in the downstream direction is a data signal (see Jolman et al., col.2 lines 25-27).

Regarding claims 28-29, the modified Jolman et al. disclose at least one auxiliary information is inserted into the signal sent in the downstream direction, this being employed by the mobile station for setting the transmission power (see Gardner, col.3 lines 50-63).

Regarding claim 31, the modified Jolman et al. do not mention about the access radio block is spread. Therefore, it is inherently that the access radio block is not spread.

Regarding claims 26-27, the modified Jolman et al. disclose the radio field attenuation (see col.4 lines 1-7). However, the modified Jolman et al. do not mention about setting the transmission power such that radio field attenuation is at least partially and/or completely compensated. Official notice is taken that the concept partially and/or complete compensation are well known in the art. It would have been obvious the attenuation of the received signal is estimated, and on the basis of this, the mobile station is able to set the transmission power to partially and/or complete compensate the path loss during transmission ensuring high throughput data transmission.

Regarding claims 33-34, the modified Jolman et al. disclose all limitations as claim 1 above. Therefore, it is inherent for the modified Jolman et al. to include a measuring, transmission power setting, and a control panel circuitry for triggering the random access radio block to the base station to provide all functions as describe as claim 1 above.

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Regarding claim 35, the modified Jolman et al. disclose all limitations as claims 1 and 22-23 above. Therefore, it is inherent for the modified Jolman et al. to include a measuring, transmission power setting circuitry for triggering the random access radio block to the base station to provide all functions as describe as claims 1 and 22-23 above.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al., in view of Gardner et al., in view of Hayashi et al. and further in view of Gilhousen et al. (US Patent 5,485,486).

Regarding to claim 21, the modified Jolman et al. fail to disclose the mobile station sets the transmission power all the higher the lower the measured reception power is.

Gilhousen et al. disclose the mobile station sets the transmission power all the higher the lower the measured reception power is (see col.6 lines 42-64). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Jolman with the above teaching of Gilhousen in order to provide the mobile station respond with a higher transmitted power to a high power cell.

6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al., in view of Gardner et al., in view of Hayashi et al. and further in view of Bender et al. (US Patent 6,366,779).

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Regarding claim 30, the modified Jolma et al. disclose everything as claim 1 above. However, the modified Jolma et al. fail to disclose the connection setup selecting a sub-range within said frequency channel.

Bender et al. disclose the connection setup selecting a sub-range within said frequency channel (see col.4 line 56 through col.5 line 7). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jolma et al. with the above teaching of Bender et al. in order to provide mobile station connection without waiting from base station.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

January 8, 2004


NAY MAUNG
SUPERVISORY PATENT EXAMINER